

Demand For Fish Products In The Czech Republic

Milena BOTLÍKOVÁ

Silesian University in Opava, Faculty of Philosophy and Science in Opava, Czechia
milena.botlikova@fpf.slu.cz

Abstract

Tourism before the time of Covid-19 was manifested by dynamic growth. This increase is associated with globalization influences such as the ability to travel long distances, the desire for new experiences. Tourism has undergone many changes in recent times, from visual cognition to tourists also focusing on cognition through taste or olfactory perceptions. New trends thus add to the development of gastronomic tourism. Fish gastronomy is part of the cultural traditions in the Czech Republic, similar to Croatia, France or Bulgaria. This type of gastronomy is also an opportunity for the fishing company to diversify its business. A pandemic created by the transformation of the geographical regrouping of tourists, tourism will be more dependent on domestic tourism. The development of fish gastronomy in the near future will depend on the approach of Czech consumers to the fish product and on the ability of tourism entities to accept and support innovative trends. The article aims to identify the consumer behaviour of the Czech population in the market of fish products.

Keyword: Fish, Attitudes, Czech Republic, Gastronomy, Price.

Introduction

If we look back to the time of the Covid-19 pandemic, it must be stated that tourism was a phenomenon of the time, it was rightly considered to be the engine of socio-economic development of the region. The growth of tourism is based on the development of new forms of tourism, globalization trends have had an impact on changes in the demand for tourism. According to López-Guzmán (2012), in the past tourism was associated with one sense - sight and the tourist was just an observer. This trend is changing; tourism prefers perception through multiple senses. The perception of taste experiences was a building block for the emergence of gastronomic tourism. According to Pavlidis (2020), people are looking for "new experiences based on divergence", on diversity. Pavlidis (2019) sees this diversity in regional gastronomy. Each meal reflects the story of each tourist destination. Through national gastronomy, it is possible to present cultural heritage, create its identity, especially in destinations without significant historical monuments (Pavlidis, 2019; Manik, 2014). Gastronomic tourism makes it possible to increase awareness of the destination and expand the offer of tourism services through the consumption of food. Behavioral intentions are considered a suitable predictor, the availability of food products and related activities keep tourists in the host destination for a long time (Hall and Mitchell, 2006). According to Freedman (2008), one can get to know the country from a gastronomic point of view, it allows us to understand the cuisine and ways of eating from the perspective of the historical heritage of the nation. The dishes reflect the human culture, customs and traditions, thus presenting the cultural heritage of the host destination. Gastronomic tourism can be used as a cultural heritage, representing everything people have done in the past. Gastronomy, therefore, contributes to the development of tourism independently, it is another overall stimulator of regional economic development.

Some destinations are beginning to realize that there is great potential for culinary tourism and they can offer food as a product of sustainable development (Pásková, Zelenka 2002). Many destinations already use gastronomy as a marketing tool to create the image of the destination (Santos, 2002). The development of gastronomic tourism has two sides to the coin, overcrowding leads to the depletion of local resources, on the other hand, the globalization of the intertwining of gastronomic cultures brings a weakening of traditional regional identities.

The terms Gastronomy Tourism or Food Tourism have been abandoned since 2012, and based on the recommendations of the World Food Travel Association, the term Food Travel is used for gastronomic tourism. For gastronomic tourism, it is possible to enchant visiting food and beverage producers, gastronomic festivals, restaurants or other places associated with the presentation of local food (Hall, 2003). The presentation of local food is realized in restaurants, local markets, fishing ponds, etc. There are national and transnational disparities concerning food and its consumption. The eating habits of France and Italy are based on traditional national gastronomy, while the United Kingdom and the United States take over the gastronomy of exotic and ethnic cuisines (Mulcahy, 2003). According to Brokaj (2014), gastronomic tourism has influenced

trends that focus more on environmental aspects. According to Turčáková (2009), shopping behaviour is influenced by lifestyle. Gastronomy is subject to other global trends. Convenient food and the preferences of multinational companies (KFC, McDonald's, etc.) have displaced national products in the past. This trend is currently being offset by the development of gastronomy based on national products and the transition to so-called Slow Food. These trends increase the value of products such as fish gastronomy.

The development of fish gastronomy is based on the support of European policy, which is related to the creation of synergies between the fishing industry and tourism (Fernández-Gómez, 2020). Many fish farms today focus on fish production, but they are also the subject of tourism. Conglomerate diversification of fisheries is mainly the result of declining incomes of tourism entities. Fish foods are part of the "Mediterranean diet" (UNESCO, Statistical Book, 2019). Dominant to fish is Mediterranean diet countries such as Greece, Italy, Croatia and Spain. Great Britain is known for its fried fish and chips, sushi is typical for Japan. The Czech Republic is a landscape of ponds and the dominant among fish is carp, which is given by history and tradition. At present, the aim is to use the potential of ponds in a much more diverse way, they are no longer just a source of fish, but coexist and cooperate with other sectors.

Factors Influencing The Demand In The Fish Food Market

Consumer patterns of consumption and their eating habits related to fish are important factors influencing the demand for fish production and the development of tourism. They also influence participation in gastronomic events and the development of a gastronomic business focused on fishing. According to Kozák and Descrop from 2009, the behaviour of visitors can be divided into three phases: "before", "during" and "after" visiting the destination. If a tourism client finds quality local ingredients, they will probably return. The sustainability of fish farming is based on consumer demand. Zelený (2020) considers the preservation of traditional dishes to be important research into consumer attitudes towards fish gastronomy and points to the need to examine attitudes towards price and frequency of consumption. He also considers the way food is prepared as an important factor. Most scientific papers focus on examining the relationships of attitudes to fish, the frequency of fish consumption according to the type of fish consumed (Can, 2015; Piekna, 2011). Can (2015) expanded the research to include an analysis of fish consumption by fish processing rate and the consumption of fresh and frozen fish.

Mellog (2019) evaluates consumption according to specific species of fish (carp, salmon, etc.) and draws attention to the price of fish, which has a decisive factor in deciding on consumption. Most of the work focuses on the analysis of attitudes towards fish from the point of view of demographic factors that enter into relational analyzes. Demographics include gender, age, educational structure, or family status. Mellog (2019) expands the set of demographic characteristics of the respondent by the size of the household and the sectoral classification of work activity. The authors use various data processing methods to analyze the perception of fish products. It is mainly a questionnaire survey or structured interviews. Lucky and Hossain (2004) used the FGD (focus group discussion) method. Statistical methods are usually used for processing questionnaire data - comparison of absolute and percentage values, deviations, averages. Pearson's Chi-square method and Spearman's correlation are suitable for processing relationships between categorical data structured into contingency tables. Factor analyzes are used for large-scale questionnaire surveys, which make it possible to simplify the explanatory power of large data files.

Data and Methodology

The aim of the article, which is based on research, is to evaluate consumer behaviour in the market of fish products in the Czech Republic. Pandemic developments are taking advantage of the pressure to regroup geographical segments of tourism demand, which will be more dependent on domestic clients. The development of fish gastronomy in the Czech Republic will thus be based primarily on the approach of the Czech population to fish dishes. A questionnaire survey was demonstrated within the research (structure of respondents - see Table 1). The questionnaire consisted of two areas, one part included demographic information about the respondents, the questionnaire also formed a range of questions related to the frequency of consumption and preferential in connection with the demand for fish in gastronomic establishments. Attitudes towards the consumption of fish products and the view of fish as a national tradition were also surveyed. Several levels of scale are produced in the literature for the frequency of consumption, eg Pientak (2008) codes consumption into six levels: "Never" - "Occasionally" - "Once a month" - "Once every two weeks" - "2 times a week" - "More than twice a week". A five-point scale was used in this research (see research below). Furthermore, data were obtained with a database of the CZSO, EUFOMA and professional literature.

Table 1: Distribution of respondents according to demographic factors

Age cluster	18-24	25-34	35-44	45-54	55-64	>65	Sum
man	42	75	91	91	79	111	489
Primary education	21	5	6	9	6	16	63
high school without graduation	10	32	36	28	31	40	177
high school with graduation	9	20	27	41	21	35	153
university	2	18	22	13	21	20	96
woman	47	88	112	77	79	114	517
Primary education	12	12	5	2	3	18	52
high school without graduation	14	22	38	27	29	44	174
high school with graduation	16	37	38	29	38	37	195
university	5	17	31	19	9	15	96
Total sum	89	163	203	168	158	225	1006

Mathematical-statistical methods were used to evaluate the data, namely the percentage expression of the occurrence of responses, as well as the evaluation of the dependence on Chi-square (where the factors are dependent if the p-value is higher than the level of significance and Spearman's correlation coefficient (closer Tošenovský). Relationship visualization was performed using correspondence maps, which allow the comparison of relationships between categorical variables. The maps were created in the STATISTICA program. Correspondence analysis according to (Bowman, 2017)) is closely related to Chi-square statistics (χ^2), but it is not an inference method for direct testing theory and hypotheses. The correspondence graph (correspondence map) graphically shows the relationship between two variables from a Pivot Table by creating a two-dimensional graph for the two strongest orthogonal factors (called dimensions), the graph is created by decomposing Chi-square statistics.

The correspondence map visualizes the relationship between the categories of each character separately and the two characters they form. Create empirically derived dimensions, it is possible to monitor the spatial distribution of categories, it is possible to see which individual categories of given variables are similar and which are not (Sucháček, 2014). Some sources (Bowman, 2017) further state that the method allows the identification of previously unobserved relationships and may thus lead to secondary testing of hypotheses. The pronunciation of the links between the categories of variables is based on the inertia indicator, which defines the degree of scattering of points, ie row and column categories. Geometric expresses the inertial degree of scattering of points in multidimensional space. The usual value of inertia (inertia) confirming the links between categorical variables is at the level of 80% and higher. (Holčík, et. al. 2015). Correspondence maps are used by many authors to process a questionnaire survey (Poláčeková, 2010, Zámková, 2015, Košťál, 2013).

Consumer behaviour on the market of fish products of the Czech Republic in the context of the EU28

Even though the Czech Republic is a major producer of freshwater fish (11th place in the EU; 2017), especially carp, their consumption in the Czech Republic is generally lower than the recommended consumption. The average consumption is 1.3 kg of freshwater fish plus 2.9 kg of marine fish (Association of Social Unions, 2019; EAGRI 2019), some databases (EUMOFA, 2017) show an "apparent" consumption of 8.2 kg per person/year. Both of these values are well below the world average (20 kg) and below the European level (11 kg / average apparent consumption EU28 / 2018 = 22.9 kg / person / year). The recommended dose is 17 kg per person per year (EAGRI, 2019).

The populations of Hungary (6.12 kg/person/year), Latvia (6.8 kg/person/year) and Bulgaria (7.0 kg/person/year) consume less fish feed in apparent consumption and the Czech Republic ranked 28th place. (5.6 kg/person). Visualization (Figure 1) shows that the inhabitants of the coastal countries Malta (85.95 kg/person), Portugal (60.92 kg/person) and Spain (46.01 kg/person/year) are the best for consumption, countries like Denmark, Luxembourg, Italy, France, Malta and Luxembourg show consumption ranging from 40 to 31 kg/person/year. The jumper of the year was Estonia (growth 72%). Overall, fish consumption in the Czech Republic has long been below the recommended level, the situation is not improving; there is no dynamic growth in consumption

The inhabitants of the Czech Republic are convinced that it is necessary to increase consumption. NAKI II research shows that out of 1,006 respondents in the Czech Republic, up to 62.3 % are convinced of the need to increase fish consumption. Furthermore, 34.3% state that consumption should be maintained and 3.4 % of respondents are in favour of reducing consumption. The problem of low consumption is the low frequency of consumption. The strategy (EAGRI, 2019) recommends increasing fish consumption and including fish in the diet up to twice a week.

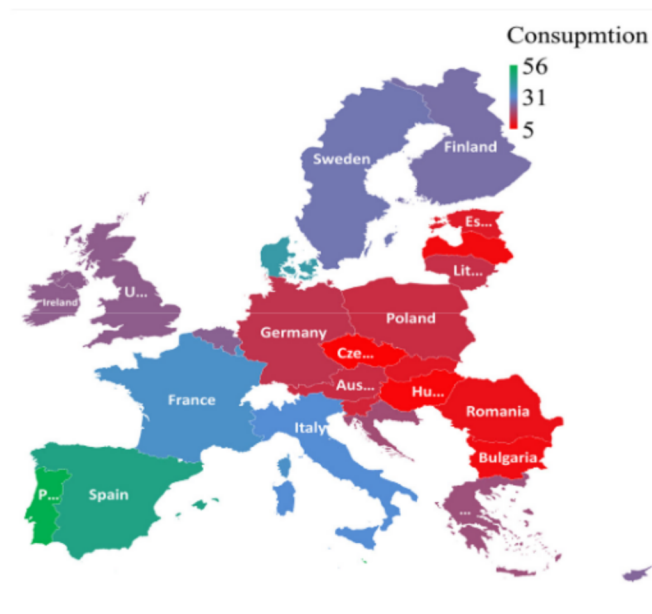


Fig. 1: Apparent consumption of fisheries and aquaculture products (2018) in kg/capita/year

According to the research, the recommended consumption (twice a week) is not usual among Czech citizens. According to the research, the recommended consumption (twice a week) is not common among Czech citizens. Of the 1006 respondents, 53.6% consume fish a maximum of 10 times a year, 28.6% a maximum of once a week for up to 2 weeks. Only 3% of respondents eat fish daily or 3-4 times a week and 15% (152 respondents out of 1006) do not eat fish at all.

If Czech gastronomy were to calculate with the Rahman hypothesis (2020) that the increase in fish consumption will be caused by an increase in the education of the population, then in the case of Czech consumers it was not possible to prove a strong link (Superman coefficient $r = 0.13$; $p\text{-value} = 0, 0000$), however, this rejection cannot be considered a dogma, as there may be a non-linear relationship between education and frequency of consumption. Those who consume fish more often (daily or 3-4 times a week) are from the group of high school-educated inhabitants (high school with and without graduation), they are mainly the elderly. This result was influenced by a higher percentage of older people with Central Bohemian education; a group of older people consume fish more often. (see figure 2).

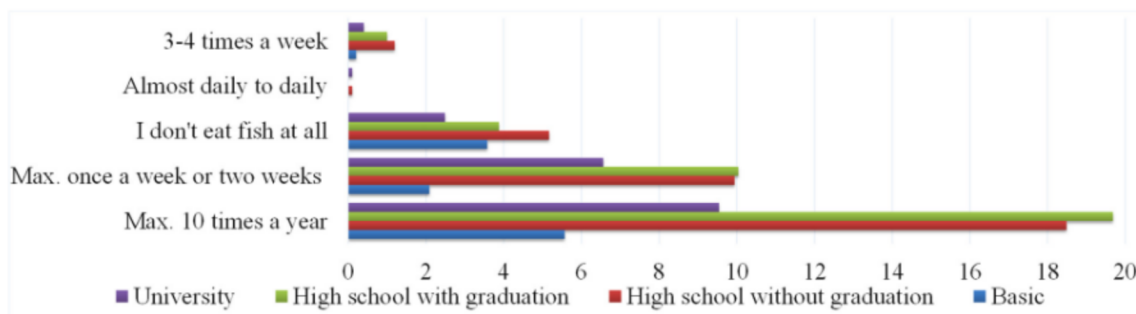


Fig. 2: Frequency of consumption of fish products (own processing)

Similar results are presented by the EUMOFA survey from 2019. Czechs indulge in fish at least once a month (42 % of respondents) and 26 % consume fish more often per year, not every month. A total of 20 % of respondents said they do not eat fish at all.

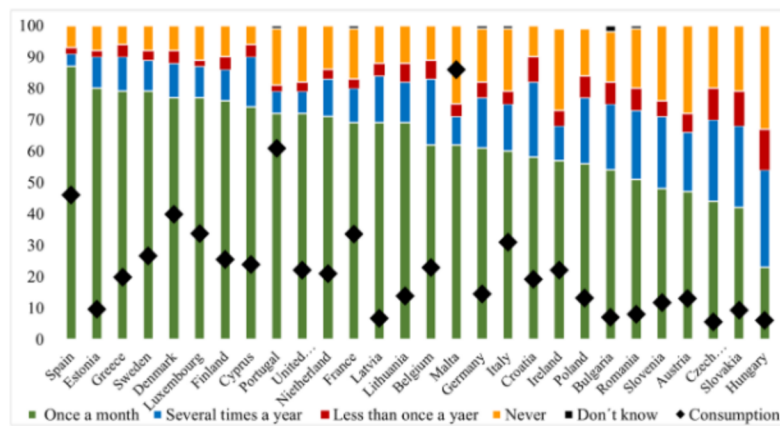


Fig. 3: How frequently respondents buy fisheries and aquaculture products (%)

If there is an increase in the share of people consuming at least 10 times a year, there will be an increase in total consumption ($r = 0.42$; $p = 0.025$). A decrease in total demand will cause an increase in the frequency of low consumption, a significant effect on the decrease in total consumption will be an increase in the share of people with a frequency of consumption "only a few times a year" ($r = -0.65$; $p = 0.000$).

However, Graph 3, which shows the frequency of fish consumption and other consumption, shows that countries with a high proportion of people consume fish more often and do not have higher overall consumption. An important element for increasing consumption is not only the frequency but also the amount of fish product on consumers' plates. Residents of the Czech Republic who consume fish more often (every day or 3–4 times a week) think that consumption should increase. People with lower consumption are already expressing their views on maintaining consumption. People who do not consume fish are arguing about reducing consumption. It follows that the increase in national consumption will not be progressive.

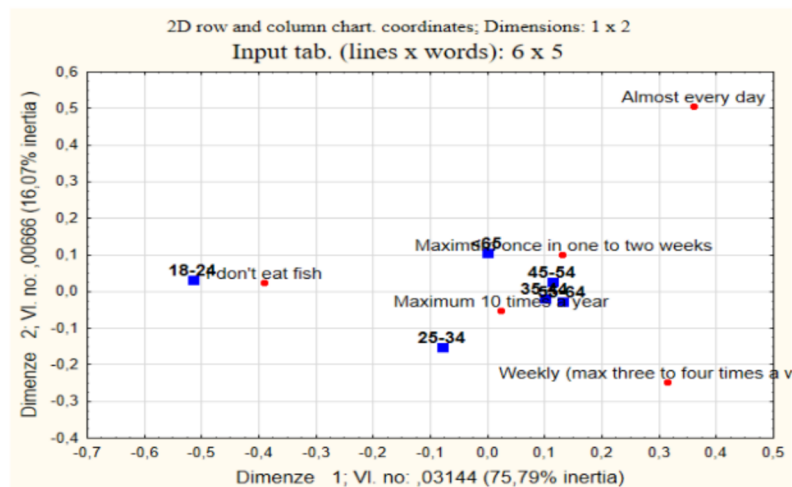


Fig. 4: Correspondence map of the age group and frequency consumption fish

According to EUMOFA (2020), the most frequent consumers in the Czech Republic (at least once a month) include the age group 40–54 years, a smaller percentage of the group aged 55 and over. Young people in the Czech Republic (15–24 years) are less prone to eating fish. Similar results were shown in the NAKI II survey, where up to 32% of adolescents stated that they do not eat fish at all. A higher frequency of consumption is manifested in people aged 65 and over, lower frequency in people aged 34–64 years. It is not possible to confirm the relationship between age and frequency, it was not possible to observe the Chi-square condition ($p = 0.002$; the condition that 80% of the expected values must be greater than 5 and the values must not be less than 1), nor the total inertia reached the specified value of 80% (see figure 4).

Fresh fish preferences, the practice of buying fresh fish and the creation of new distribution channels can be an accelerator of higher consumption of fish products. All countries in the TOP places in consumption according to the Country analysis (2019) are those countries where the share of shoppers at traders is a significant share of purchases of fresh fish (Malta, Spain, Portugal and Cyprus, see Figure 5). On the other hand, the people of Luxembourg have high overall consumption, but the share of buying fresh fish from traders is lower. Czech buyers form a segment buying more frozen fish (similarly to the inhabitants of Slovakia, Poland, Austria or Germany) compared to fresh fish. (See figure 2). The majority of fish distribution

is in the form of hypermarkets (98%, EU 77%), compared to the EU, where consumers use purchases in marketplaces and markets.

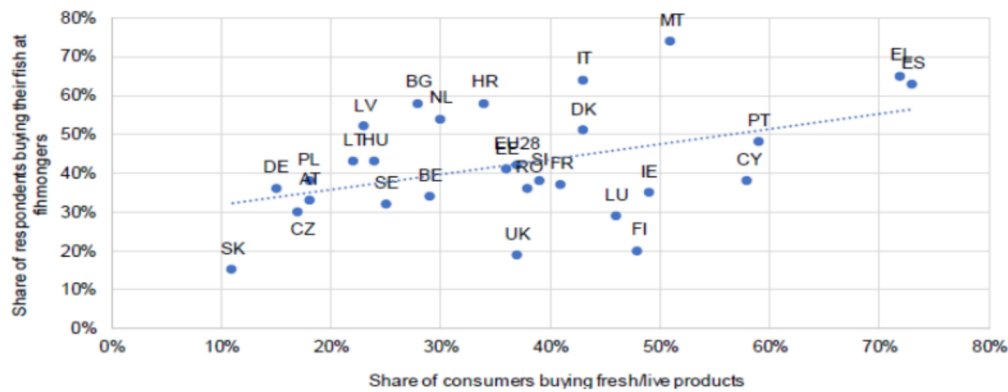


Fig. 5: Relationship between the share of respondents buying their fish at fishmongers and share of consumers buying fresh/live products (EUMOFA elaboration from Eurobarometer data) ES = Spain; CY=Cyprus, PT= Portugal; MT = Malta;

One of the main influences on decisions about the consumption of fish products seems to be their high price. Awareness of the high price and limited availability of fresh fish from domestic production was already in 2016 (Strategy, 2016) the main obstacles to increasing fish consumption. Similar results resulted from partial research located in the Moravian-Silesian Region of the Czech Republic in 2019. Retail consumer prices of carp and trout (live fish) fluctuate year on year. Live carp was not among the cheap during the years 2014-2020, prices showed less variance than beef or pork. Trout is one of the most expensive meat products on the Czech market (CZSO, 2020a, see Figure 6).

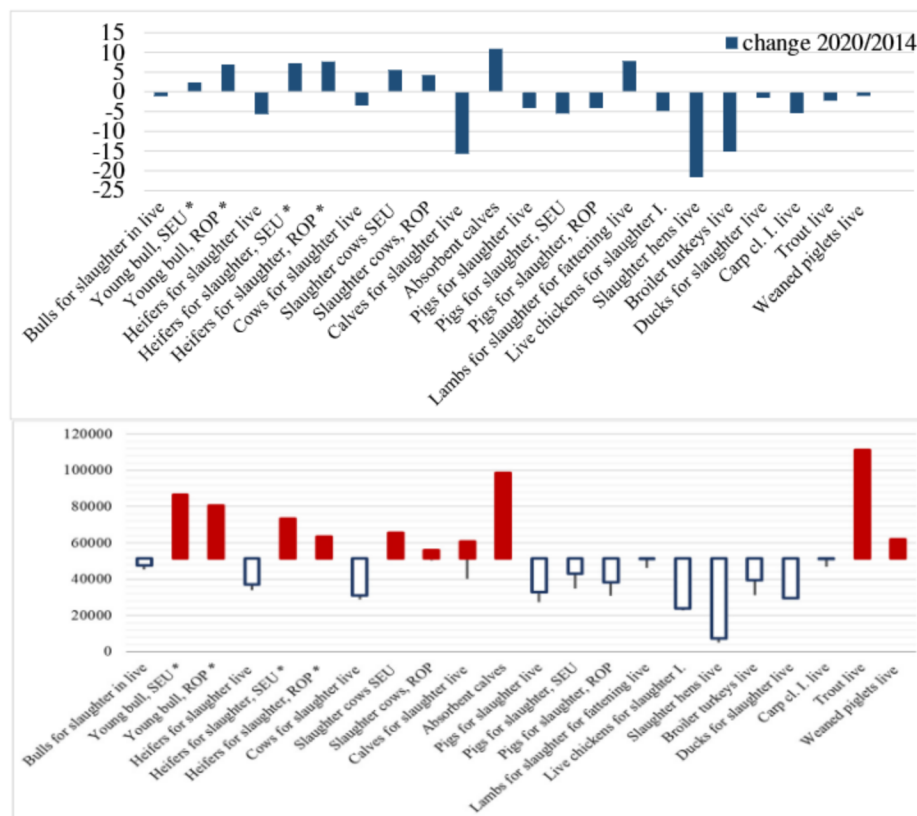


Fig. 6: Consumer prices of various types of meat

Graph 6 shows the problem of consumption and prices of fish products, especially the attitude to the price of Czech fish products. Despite low consumption, Czech households spend more on fish products and seafood than regions with above-average consumption (see Figure 7).

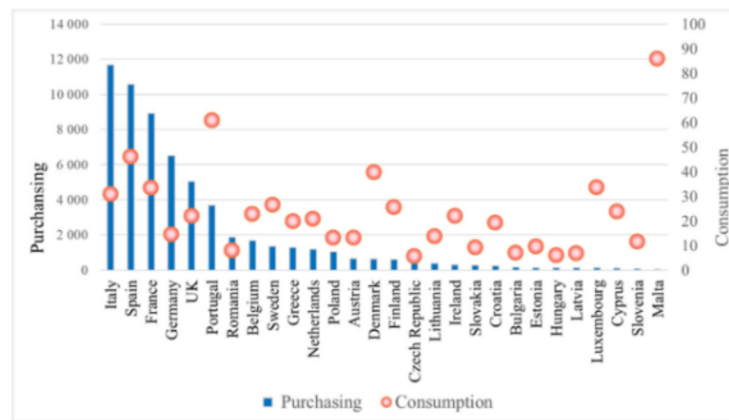


Fig. 7: Household expenditure on fish products in EU28 countries in millions of Euros and fish consumption per person/year

Low fish consumption is also the result of purchasing decisions in restaurants. If we analyze in more detail the possible choice of food in a restaurant with an unlimited financial budget, approximately a quarter of respondents opted for beef (24 %), pork and game. Approximately 10 % of respondents chose Czech-produced fish or sea fish.

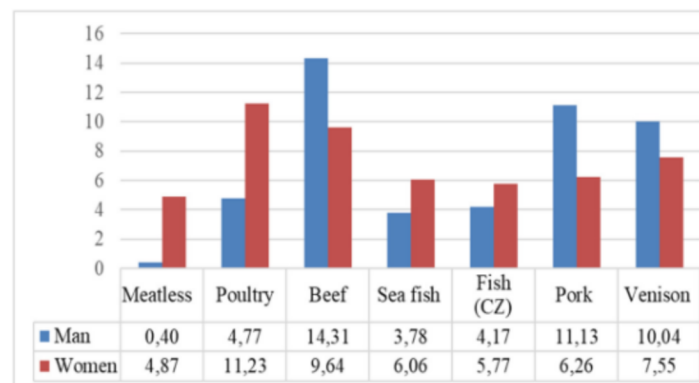


Fig. 8: Choice of food in restaurants

The reluctance to consume a fish can be attributed to the uncomfortable way of dining (see figure 8). In the case of the choice of fish, women, who exceed the selection of seafood, were more inclined to choose fish. Men focus more on beef, pork and game. The selection shows the preference for a healthy lifestyle for women.

By evaluating the species offer in 44 restaurants in the Czech Republic, which specialize in fish production, the offer of domestic fish is dominated by classic carp, from seafood it is salmon. The prices of fish dishes in restaurants do not differ in price from other meat products. The average price of carp is around 1.8 € / 100 grams, the most expensive freshwater fish is pike perch (7 €/100g). Among sea fish, the most frequently offered fish is salmon, whose average price is 8.8 €/100g. If we compare fish with other meats, then chicken (approx. 3 - 4.8 €/100g) is below the price level of the fish menu. Overall, the price of fish products in restaurants is higher in price than other meat products. Beef is at the level of sea fish (6.8-8.4 €/100g). The balanced choice between more expensive seafood and cheaper freshwater fish corresponds to the conclusions of Zelený, et.al (2020), which states that customers are more likely to buy cheaper species of fish for home cooking while buying more expensive fish food in restaurants. It is obvious that a visit to a restaurant is associated with the added value of the experience.

The barrier to increased fish consumption in the Czech Republic is the understanding of fish as a Lenten meal and a conservative approach to fish preparation. Czechs mostly consume herring and carp. Tuna and cod are the most consumed in EU countries. In the case of questions with which research respondents associate the term "fish", research respondents in most cases associate fish with the Christmas holidays. For most respondents, fish is a Lenten food, which corresponds to the large consumption of carp. The result of the analysis shows that the first axis of the correspondence map explains 81.47 % inertia (see Figure 10), value Chi-square 114.49 and $p=0.0$. We can state that there is a link between age and the perception of fish as traditional food.

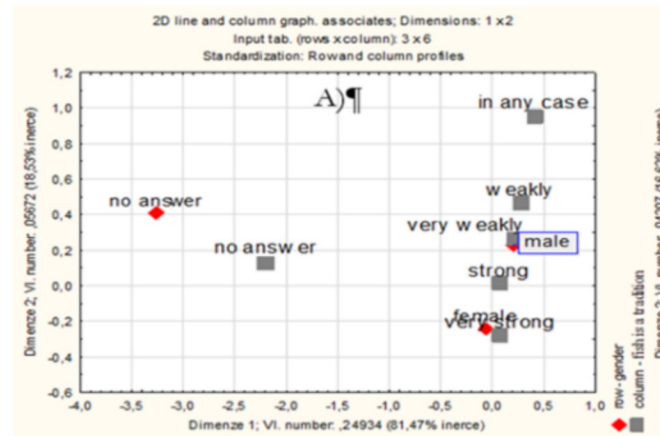


Fig. 9: Correspondence maps of gender and fish perception from the point of view of traditions

Conclusion

To maintain gastronomic tourism focused on fish products, a condition of a positive attitude in fish is necessary. An integral part of this attitude is the willingness to consume fish, i.e. consider fish as a palatable food. However, fish must also be affordable. As in Poland, consumption in the Czech Republic is at a lower level, fish dishes are still associated with religious traditions and consumer behaviour does not correspond to the consumer behaviour of coastal destinations where fish is a common food. It is clear that consumer awareness of fish origin is at a very low level and has not really improved in recent years (CZSO, 2020b; 1995-4.9 kg/person; 2010 - 5.6 kg/person). To increase total consumption, attention should not be focused only on the amount of fish consumed, the frequency of consumption is important. Consumption of fish should be spread evenly throughout the year, should not be sudden, and should not be concentrated until certain months. (Menhemet et al. (2015). However, these factors cannot be considered in isolation.

To increase the consumption of fish products of Czech production by Czech consumers, it is also necessary to improve the appearance of the products offered. Product presentation can increase consumer empathy concerning high costs. To increase consumption, strengthening distribution channels through direct retailers and markets is being considered. Furthermore, it is necessary to motivate consumers to buy fresh fish and thus strengthen the activity of the Czech fishing industry in the context of tourism. The Czech Republic should target marketing activities for the younger generation, which is currently reluctant to consume fish products.

Acknowledgement

The paper was prepared within the solution of project No. DG18P02OVV057 from the program to support applied research and experimental development of national and cultural identity for the years 2016 to 2022 (NAKI II) at the Faculty of Philosophy and Science at Silesian University in Opava.

References

- Bowman, N. (2017), The SAGE Encyclopedia of Communication Research Methods, Research, Inspirations for. SAGE Publications, Inc, Thousand Oaks.
- Brokaj, M. (2014), The impact of the gastronomy offer in choosing Tourism destinations the case of Albania, *Academic Journal of Interdisciplinary Studies*, 3(2), 249-258.
- Can, MF., A. Günlü, A. and Can, MY. (2015), Socioeconomic implications of biosecurity practices in small-scale dairy farms, *Food Science and Technology*, 35(2), 339-346.
- Country analysis. (2019). Eumofa - European Market Observatory for fisheries and aquaculture [Online]. Eumofa. [Retrieved February 12, 2021]. Available: <<https://www.eumofa.eu/cs/czech-republic>>
- CZSO. (2020a). Průměrné ceny zemědělských výrobků. [Online]. CZSO.cz [Retrieved February 12, 2021]. Available <https://vdb.czso.cz/vdbvo2/faces/cs/index.jspx?_af=VYSTUP-objekt-vyhledavani&vyhltext=ceny+mas&bkvt=Y2VueSBtYXNM.&katalog=all&pvo=CEN02AA>
- CSZO. (2020b). 61 let českého strávnicka 1950 – 2010. [Online]. CZSO.cz. [Retrieved February 12, 2021]. Available: <<https://www.czso.cz/csu/czso/61-let-ceskeho-stravnika-n-0lw5yf4eq0>>
- Eagri.cz. (2019). Situační a výhledová zpráva ryby Situační a výhledová zpráva ryby.[Online] EAGRI. [Retrieved June 20, 2020]. Available: < http://eagri.cz/public/web/file/645372/Ryby_2019_WEB.pdf>

- EUMOFA. (2020). Eurobarometer data EUMOFA [Online]. Eumofa - European Market Observatory for fisheries and aquaculture. [Retrieved February 12, 2021]. Available < <https://www.eumofa.eu/>
- Fernández-Gámez, M.A. (2020), The Effect of Countries' Health and Environmental Conditions on Restaurant Reputation, *Sustainability*, 12(23), Article no 10101.
- Freedman, P. (2008), *Jídlo: dějiny chute*, Editor Paul H Freedman. Mladá fronta Praha.
- Hall, C. M., Sharples, L., Mitchell, R., Macionis, N. and Cambourne, B. (Eds.). (2003). *Food Tourism Around the World: Development, Management and Markets*. Oxford: Butterworth-Heinemann.
- Hall, M.C., Sharples, L., Mitchell, R., Macionis, N. and Cambourne, B., (2006). *Food Tourism Around the World: Development, Management and Markets*. Oxford: Butterworth Heinemann.
- Holčík, J. and Komenda, M. (2015). *Matematická biologie: e-learningová učebnice*. [Online]. E-learning textbook. [Retrieved January 01, 2020]. Available: < <https://portal.matematickabiologie.cz/index.php?pg=analiza-a-hodnoceni-biologickych-dat--vicerozmerne-metody-pro-analyzu-dat--ordinacni-analyzy--korespondenci-analyza-hodnoceni-modelu.>>
- Košťál, J. (2013), *Vybrané metody vícerozměrné statistiky (Selected multivariate statistics methods)*, Institut pro kriminologii a sociální prevenci. Praha.
- Kozak, M. and Decrop, A. (2009), *Handbook of Tourist Behavior: Theory and Practice*, Routledge, New York.
- López-Guzmán, T. and Sánchez-Cañizares, S. (2012), Gastronomy, Tourism and Destination Differentiation: A Case Study in Spain, *Review of Economics & Finance*, 2, 63-72.
- Lucky NS., M. Haque MU. and Hossain, M. (2004), Fish Consumption Pattern in Three Slums of Mymensingh. *Progressive Agriculture*, 15(2), 67-76.
- Manik, A. (2014), Gastronomy tourism and destination image formation, *Indian Journal of Applied Hospitality & Tourism Research*, 6, 68-75.
- Mellog, M.C.S., Njikoue, J.M., Leng, M.S. and et al. (2019), Local Preferences and Perception towards the Consumption of Farmed Fish in the Center Region of Cameroon, *International Journal of Food and Nutritional Science*, 6(2), 81-88.
- Pavlidis, G. and Markantonatou, S. (2020), Gastronomic tourism in Greece and beyond: A thorough review. *International Journal of Gastronomy and Food Science*, vol. 21, Article no. 100229.
- Mulcahy, JD. (2009). Making the case for a viable sustainable gastronomic tourism industry in Ireland, Dissertation. Universita in Adelaide. [Online]. Academia.edu. [Retrieved January 01, 2021]. Available <https://www.academia.edu/1532945/MA_Dissertation_Making_the_case_for_a_viable_sustainable_gastronomic_tourism_industry_in_Ireland?email_work_card=thumbnail>
- Pásková, M. and Zelenka, J. (2002), *Cestovní ruch – výkladový slovník*, Ministerstvo pro místní rozvoj, Praha.
- Santos, J.AC., Santos, M.C., Pereira, L.N., Richards, G. and Caiado, L. (2020), Local food and changes in tourist eating habits in a sun-and-sea destination: a segmentation approach, *International Journal of Contemporary Hospitality Management*, 32(11), 3501-3521.
- Sucháček, J., Freidrich, V., Šed'a, P. and Benfšková, T. (2014). South Moravian and Moravian-Silesian Region in National TV Reporting: Selected Aspects. Proceedings of the XVII. Mezinárodní kolokvium o regionálních vědách, ISBN: 978-80-210-6840-7, 18-20 Juny 2014, Hustopeče, Česká republika, 429-435.
- Strategie 2016. [Online]. EAGRI.cz. [Retrieved July 12, 2020]. Available <https://zakazky.eagri.cz/document_49238/865ee9dbbd3023524d339111ef8cd446-priloha-c-5-komunikacni-strategie-2016-pdf>
- Statistical book: Culture statistics. [Online]. Eurostat. [Retrieved April 12, 2020]. Available < <https://ec.europa.eu/eurostat/documents/3217494/10177894/KS-01-19-712-EN-N.pdf/915f828b-daae-1cca-ba54-a87e90d6b68b>>
- Poláčková, J. and Jindrová, A. (2010), Vyhodnocení dotazníkového šetření pomocí korespondenční analýzy, *Ekonomická revue*, 13(3), 173 – 178.
- Pieniak, Z., Verbeke, W., Perez-Cueto, F., Brunsø, K. and De, HS. (2008), Fish consumption and its motives in households with versus without self-reported medical history of CVD: a consumer survey from five European countries, *BMC Publ. Health*, 8, 1-14.
- Tošenovský, F. (2014), *Statistické metody pro ekonomy*, Slezská univerzita v Opavě, Karviná.
- Turčínková, J. and Stávková, J. (2009), Chování spotřebitelů na trhu potravin, *Acta Universitatis Agriculturae Et Silviculturae Mendeliana Brunensis*, 57(3):173-178.
- World Food Travel Association. [Online]. World food Travel [Retrieved July 12, 2020]. Available <<https://worldfoodtravel.org/what-is-food-tourism/>>
- Zámková, Z. and Prokop, M. (2015). Causes and Financial Consequences of Flight Delays in Czech Republic. *Acta academians*, 10(3), 110-120.
- Zelený, J. and Vins, Z. (2017), Fish, Culture and Culinary Art - Relation to Local Communities and Potential for Regional Development: Review Study, Proceedings of the Conference of College of Hospitality International Scientific Conference on Hospitality, Tourism and Education, ISBN: 978-80-87411-99-5, 11 October 2017, Praha, Česká Republika, 212-221.

- Zelený, J. Plzaková, L, Hán, J. and Kašpar, J. (2020), Pale Lager and Double Carp Fries, Please. The McDonaldization of the Culinary Culture in the Czech Republic, *Economia agro-alimentary/Food Economy*, 22(1), 1-26.